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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,945	10/12/2004	Brendon Lilly	120496	8467
25944	7590	12/29/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			KIM, PAUL L	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/501,945

Applicant(s)

LILLY, BRENDON

Examiner

Paul Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5 and 8-25 is/are rejected.  
7) ☒ Claim(s) 6 and 7 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-11, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al in view of Engstrom et al.

With regard to claims 1, 9, and 10, Remboski et al teaches a method for monitoring the performance of at least one machine operator including the steps of: measuring at least one machine parameter during operation of the machine by the operator, the machine parameter related to the operation of the machine by the operator (¶ 62); measuring at least one machine parameter (fig. 4, parts 402-408), and calculating at least one performance indicator for the at least one machine operator for the machine operator from the machine parameter (fig. 4, step 410). Remboski et al, however, does not specify a performance indicator distribution comprising a range of values being used to calculate a performance indicator. Engstrom et al teaches a method of monitoring the operation of a machine that uses a performance indicator distribution comprising a range of values to calculate overall performance (fig. 5). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so that a performance indicator distribution is used, as taught by Engstrom et

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al, so as to obtain more extensive data information for improved evaluation purposes.

With regard to claims 2 and 3, Remboski et al teaches providing feedback to the operator by displaying a performance indicator in real-time (fig. 1, part 114 and ¶ 37) and once the machine has completed an operation (¶ 83).

With regard to claims 4 and 8, Remboski et al teaches a machine parameter being a dependent machine parameter (fig. 1, parts 112-118).

With regard to claim 5, Remboski et al teaches machine parameters being sole parameters (¶ 62).

With regard to claim 11, Remboski et al teaches a performance indicator being generated by an algorithm (¶ 5).

With regard to claims 14 and 15, Remboski et al teaches combining performance indicators to yield overall performance where the weightings of the indicators change according to the other indicators (last two sentences of ¶ 41).

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al and Engstrom et al in view of Castelli et al.

Remboski et al and Engstrom et al teach using an algorithm to generate performance indicators but does not specify the algorithm being an LBG. Castelli et al teaches using algorithms such as LBG for information retrieval in multidimensional systems. Since Remboski et al and Castelli et al are both within the art of determining indicator distributions, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so

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that an LBG algorithm is used, as taught by Castelli et al, so as to derive the benefit of improved performance monitoring accuracy.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al and Engstrom et al in view of Greineder et al.

Remboski et al and Engstrom et al teach generating a performance indicator distribution, but does not specify using an LRM. Greineder et al teaches a method for ranking a plurality of features in a set based on importance using an LRM method (abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so that an LRM method is used, as taught by Greineder et al, so as to derive the benefit of an efficient monitoring system that improves overall system performance.

5. Claims 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al in view of Deb et al and Engstrom et al.

With regard to claims 16-20, Remboski et al teaches a system for monitoring the performance of at least one machine operator comprising: a measuring device for measuring at least one machine parameter during operation of the machine by the operator, the machine parameter related to the operation of the machine by the operator (§ 62), a means for measuring at least one machine parameter (fig. 4, steps 402-408), and a module for calculating at least one performance indicator for the machine operator from the parameter (fig. 4, step 410). Remboski et al, however, does not specify a remote server for

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generating the performance indicators. Deb et al teaches a remote server that monitors operating parameters of remote machines, equipment, etc (abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so that a remote server monitors the machine, as taught by Deb et al, so as to derive the added benefit of convenience from having the ability to monitor a plurality of machines from one location.

Remboski et al, also does not teach a performance indicator distribution comprising a range of values being used to calculate a performance indicator. Engstrom et al teaches a method of monitoring the operation of a machine that uses a performance indicator distribution comprising a range of values to calculate overall performance (figs. 3 & 4). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski et al, so that a performance indicator distribution is used, as taught by Engstrom et al, so as obtain more extensive data information for improved evaluation purposes.

With regard to claims 21-25, Remboski et al teaches a display providing feedback to the operator by indicating performance in real-time (fig. 1, part 114 and ¶ 37) and indicating performance once the an operation has been completed (¶ 83).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-5 and 8-25 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

7. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 571-

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272-2217. The examiner can normally be reached on Monday-Thursdays 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK  
December 20, 2005

